

We UVCare...

Application Optimised UV for Pools & Leisure



SWIMLINE PH



UV treatment for pools and spas

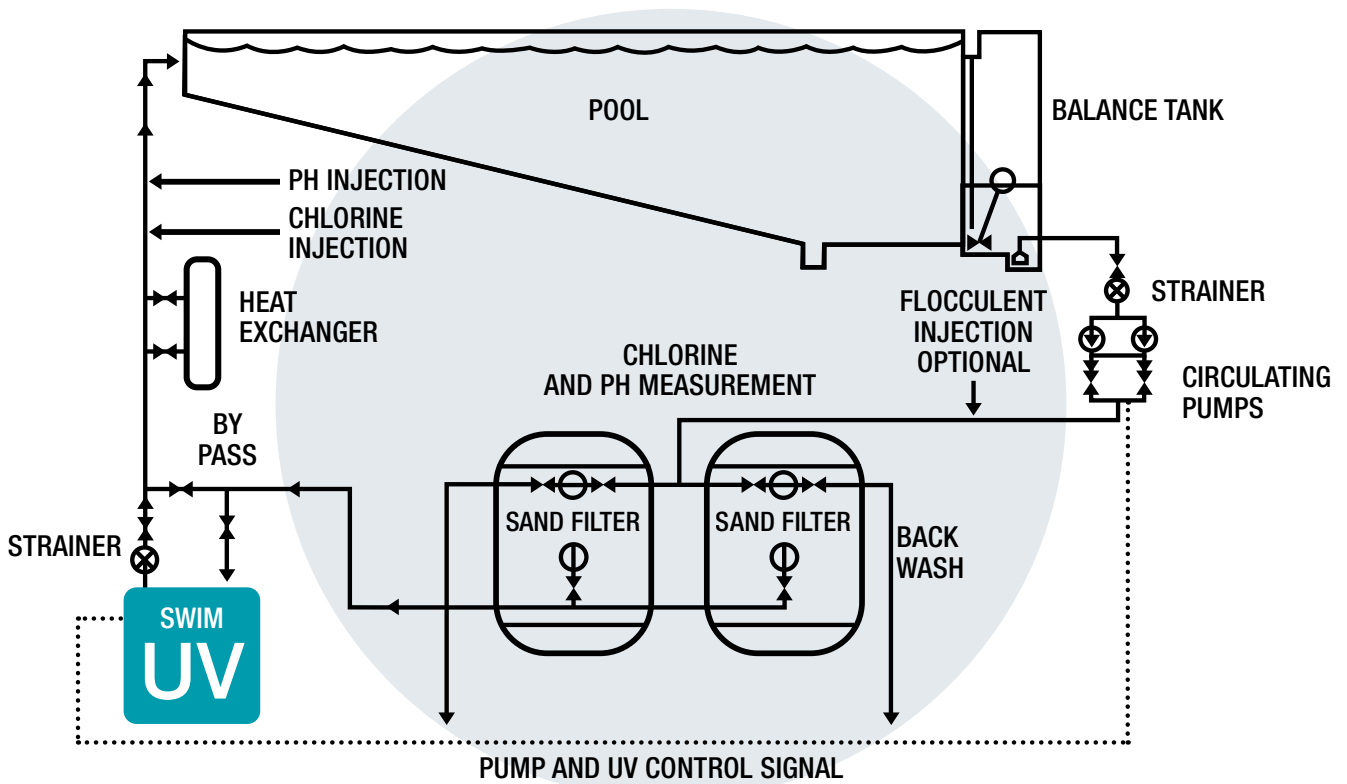
Our SwimLine PH UV systems deliver effective treatment (chloramine removal and disinfection) for all leisure facilities from spas through to large competition pools. By using medium pressure lamps we break down not only monochloramine but also di- and trichloramine which are responsible for eye and skin irritation, headaches and unpleasant odours. Using UV in the water treatment process provides bathers and staff with a pleasant and safe environment. UV has the added advantage of being effective against chlorine resistant microorganisms such as *Cryptosporidium* and is up to 5 times cheaper to maintain and occupies only 1/10th of the space of ozonation equipment.

berson

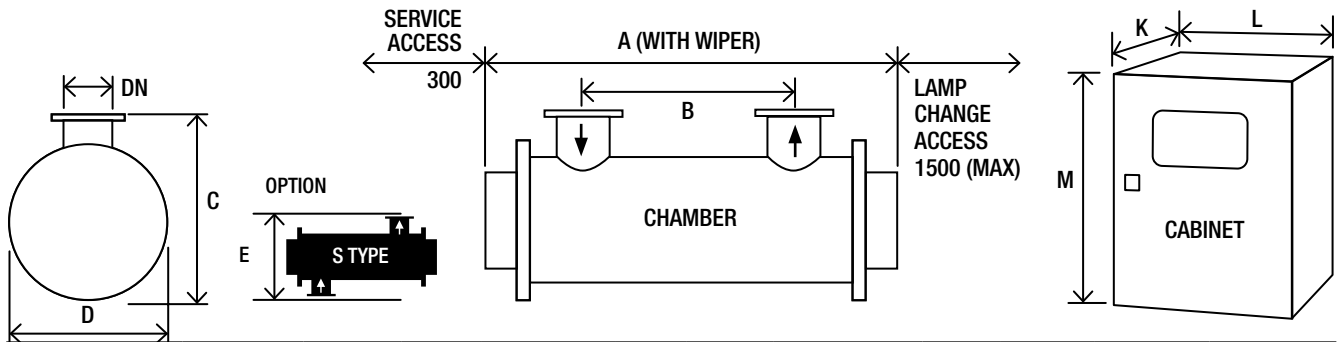
hanovia

aquionics

SwimLine PH™ - Single Pool with UV treatment



| KEY FEATURES | WHAT IT GIVES YOU | BENEFITS FOR YOU |
|---------------------------------|--|---|
| INTELLIGENCE | | |
| UV intensity monitor | Continuous verification of performance with in-built low dose alarm | Easy to monitor and log system performance |
| Flow meter input | Real time adjustment of lamp power based on flow | Saves power |
| OPTIMISATION | | |
| Medium pressure lamp | Provides UV light at 200 to 400 nm wavelengths ideal for the destruction of mono-, di- and trichloramine | Visibly clear water with reduced odours |
| | | Reduced building corrosion risk |
| | | Minimises bathers' eye and skin irritation |
| | Provides germicidal wavelengths to disinfect the water | Protect bathers from chlorine resistant microorganisms such as <i>Cryptosporidium</i> or <i>Giardia</i> |
| | Automatic wiper (quartz cleaning) | Self cleaning |
| INTEGRATION | | |
| Designed specifically for pools | UVShield™ power cut-out for lamp access (option) | Enhanced operator safety when changing a lamp |
| | Water leak detection (option) | Increased bather safety when used with a strainer |



| Model Number | Maximum Power (kW) | Min UVT (%) | Dimensions (mm) | | | | | | | | | Approx weight (Kg) | |
|-----------------|--------------------|-------------|-----------------|-----|-----|-----|-----|-----|-----|------|------|--------------------|-----------------|
| | | | A | B | C | D | E | DN | K* | L | M** | Chamber (Empty) | Control Cabinet |
| SwimLine PH 60 | 1.6 | 85 | 850 | 240 | 320 | 240 | 400 | 80 | 330 | 750 | 850 | 40 | 85 |
| SwimLine PH 70 | 1.6 | 85 | 850 | 240 | 320 | 240 | 400 | 100 | 330 | 750 | 850 | 45 | 85 |
| SwimLine PH120 | 2.7 | 78 | 1300 | 660 | 320 | 240 | 400 | 150 | 330 | 750 | 850 | 50 | 85 |
| SwimLine PH 195 | 4.4 | 81 | 1300 | 660 | 320 | 240 | 400 | 150 | 330 | 750 | 850 | 50 | 85 |
| SwimLine PH 295 | 4.4 | 90 | 1300 | 610 | 420 | 290 | 550 | 200 | 330 | 750 | 850 | 75 | 85 |
| SwimLine PH 470 | 5.8 | 84 | 1300 | 610 | 420 | 290 | 550 | 200 | 330 | 900 | 1100 | 75 | 165 |
| SwimLine PH 600 | 5.8 | 93 | 1300 | 550 | 505 | 410 | 600 | 250 | 330 | 900 | 1100 | 120 | 165 |
| SwimLine PH 705 | 5.8 | 93 | 1800 | 960 | 505 | 410 | 600 | 300 | 330 | 900 | 1100 | 160 | 165 |
| SwimLine PH 850 | 12.5 | 62 | 1800 | 960 | 505 | 410 | 600 | 300 | 330 | 1100 | 1600 | 160 | 270 |
| SwimLine PH 990 | 16.5 | 76 | 1800 | 930 | 540 | 430 | 650 | 350 | 330 | 1100 | 1600 | 200 | 282 |

* Allow dimension L in front of cabinet for door opening and panel access.

** M dimension includes the space for the cabinet mounting brackets but you need to allow space below the cabinet for cable entry and access (minimum of 250 mm).

All dimensions are approximate for clearance purposes only. We have a policy of continuous product development, exact drawings are available on request.

All specifications are subject to change without notification. Your distributor or our account manager can advise on correct sizing and specification requirements

UV CHAMBER

| | |
|----------------------------------|--|
| Material: | Stainless steel 316L / 1.4404 |
| Internal finish: | As made pipe and tube, welds as laid, electropolished and passivated |
| External finish: | Sateen polish (120 grit) electropolished and passivated |
| Process (mating) connections: | Flange EN 1092-1 PN16 |
| Drain connection: | BSPT or NPT if ANSI flange |
| End plate: | Removable end plate |
| Degree of protection: | IP65 equivalent to NEMA 4 but not for outside use |
| Wiper: | Automatic (electrically driven) |
| Arc tube (lamp): | Medium pressure |
| Arc tube enclosure: | Pure quartz (F200) |
| Number of arc tubes (lamps): | 1 (SwimLine PH 60 - 705) 3 (SwimLine PH 850) 4 (SwimLine PH 990) |
| Expected lamp life: | 4000-8000 hours |
| Temperature sensor: | Yes |
| UV monitor: | Wet UV monitor (to minimum UVT) |
| Working fluid temperature: | 1°C to 60°C |
| Strainer: | Yes |
| Hydrostatically pressure tested: | Yes to PED requirements EN 13445 |
| Chamber mounting: | Horizontal only |
| Operating pressure: | 6 bar (positive pressure only) |
| Pressure loss: | Typically < 70 mbar |
| Seals: | EPDM |

OPTIONS

Operation and Maintenance manual and printed Installation and Commissioning manual in Chinese, English, French, German and Spanish

Flange options: ANSI 150 (with NPT drain), JIS, Table 'E'

Lead length: 20 m, 30 m or 50 m cabinet to chamber

Skid mounting (not ship board or earthquake zone)

Air vent connection: BSPT or NPT if ANSI flange

OPTIONS (CONTINUED)

Aggressive water package: For 400 ppm to 20000 ppm chloride water

UVShield™: Power cut-out for lamp access

Water leak detection: Detects water leaks from quartz sleeve

Chamber configuration: S shape

CABINET (CONTROLLER PHOTON)

Material: Polyester coated carbon steel

Degree of protection: IP54 NEMA 12

Supply voltages (nominal): PH 60-120 95 V to 260V (+/-10%)
PH 195-705 190 V to 480 V (+/-10%)
PH 850-990 380 V to 480 V (+/-10%)
50/60 Hz

Operating temperature range: 5°C to 40°C

Relative humidity: <85% non-condensing

Cooling fans: Yes

Interconnecting cable: 10 m cabinet to chamber

Power adjustment: 4 level power stepping

CUSTOMER OUTPUTS

4-20 mA passive or active outputs: UV dose

VFC outputs: System warning, lamp ready, low UV dose, common trip, remote reset, ELCB or water leak, system available, local or remote mode

CUSTOMER INPUTS

4-20 mA passive or active input: Flow meter

VFC inputs: Remote stop/start and remote reset

CUSTOMER COMMUNICATIONS PORT

None

APPROVALS

CE marked, UL listed E 149108



SWIMLINE PH

Also available in our Pools & Leisure product range...



SWIMLINE PQ

3rd party validated systems for critical
disinfection and dechloramination



www.weuvcare.com

BERSON, HANOVIA & AQUIONICS WORKING TOGETHER AS PART OF THE HALMA GROUP.

Netherlands

t: +31 40 2907777
e: sales@bersonuv.com

China

t: +86 21 61679599
e: china@hanovia.com

USA

t: +1 980 256 5700
e: sales@aquionics.com

Germany

t: +49 611 44575375
e: verkauf@hanovia.com

Malaysia

t: +60 16 440 8834
e: asia@hanovia.com

Canada

t: +1 980.256.5700
e: sales@aquionics.com

United Kingdom

t: +44 1753 515300
e: sales@hanovia.com

Mexico

t: +1 980.256.5700
e: sales@aquionics.com